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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/072,403

02/08/2002

Klein A. Rodrigues

2004.ALC

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12/15/2006

NATIONAL STARCH AND CHEMICAL COMPANY

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EXAMINER

DELCOTTO, GREGORY R

ART UNIT

PAPER NUMBER

1751

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,403

Applicant(s)

RODRIGUES, KLEIN A.

Examiner

Gregory R. Del Cotto

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed 9/25/06.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,5,7,15 and 17-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26 is/are allowed.
- 6) ☒ Claim(s) 2, 3, 5, 7, 15, 17, 18, 20-25 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. Claims 2, 3, 5, 7, 15, and 17-26 are pending. Applicant's arguments and amendments filed 9/18/06 have been entered.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/25/06 has been entered.

Objections/Rejections Withdrawn

The following objections/rejections as set forth in the Office action mailed 7/17/06 have been withdrawn:

The rejection of claims 1-3, 5, 6, 8, 15, 17, 18 and 20-25 under 35 U.S.C. 102(b) as being anticipated by EP 634,486 has been withdrawn.

The rejection of Claim 7 under 35 U.S.C. 103(a) as being unpatentable over EP 634,486 has been withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 3, 5, 7, 15, 17, 18, and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Bock et al (US 4,997,878).

Bock et al teach novel hydrophobically associating ter or tetra polymers which are the same as recited by the instant claims. These polymers are useful in a variety of applications. See Abstract and column 6, lines 5-50. The Examiner asserts that a variety of applications as taught by Bock et al would inherently suggest use on one of the substrates as recited by instant claim 22. Bock et al disclose the claimed invention with sufficient specificity to constitute anticipation.

Claims 2, 3, 5, 7, 15, and 17-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al (US 6,310,124).

Huang et al teach polymers which are the same as recited by the instant claims in aqueous dispersions. See column 9, lines 30-60. The suspensions of dispersed

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solids may be found and used in the papermaking area, may be used as retention aids, drainage aids, charge control agents, deinking, waste dewatering, etc. See column 22, line 50 to column 23, line 40. Surfactants may also be used in the compositions in amounts from about 10% by weight or less. See column 15, lines 1-55.

Huang et al do not teach, with sufficient specificity, an amide polymer containing anionic units used on a specific substrate as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, to formulate an amide polymer containing anionic units used on a specific substrate as recited by the instant claims, with a reasonable expectation of success, because the broad teachings of Huang et al suggest an amide polymer containing anionic units used on a specific substrate as recited by the instant claims.

Claims 2, 3, 5, 7, 15, 17, 18, and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rauterkus et al (US 5,089,570).

Rauterkus et al teach dispersion polymers of ethylenically unsaturated monomers which are prepared in the presence of protective colloids and if appropriate, emulsifiers by polymerization in an aqueous medium and are present in aqueous dispersion form or in finely divided dispersed dry powder form. See Abstract. Note that, the Examiner asserts that Rauterkus et al suggest polymers which are the same as recited by the instant claims. See column 6, line 50 to column 8, line 55. The dispersion polymers may be used in a number of different fields in the form of their aqueous dispersions or as a solution in organic solvents. The compositions may be used as a non-corrosive primer composition for metals, in the construction industry as

binder in the preparation of concrete, mortar, plaster, and paints, as a starting material for the production of films, foils, fibers, adhesives, lacquers, pressing compositions, as auxiliaries for sticking leather, textiles, and paper, and as binders in paper making, paper finishing, etc. See column 12, lines 25-45.

Rauterkus et al do not teach, with sufficient specificity, an amide polymer containing anionic units used on a specific substrate as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, to formulate an amide polymer containing anionic units used on a specific substrate as recited by the instant claims, with a reasonable expectation of success, because the broad teachings of Rauterkus et al suggest an amide polymer containing anionic units used on a specific substrate as recited by the instant claims.

Allowable Subject Matter

Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 26 is allowed.

None of the references of record, alone or in combination, teach or suggest the specific amide containing polymer as recited by instant claims 19 and 26.

Response to Arguments

Note that, Applicant's arguments are moot since all previous prior art rejections have been withdrawn and a new grounds of rejection has been set forth above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.

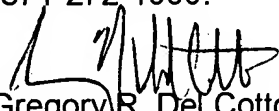
Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gregory R. Del Cotto
Primary Examiner
Art Unit 1751

GRD
December 11, 2006